# **INSTRUCTIONS**

### FOR THE NSF-NIH SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1996

#### PURPOSE OF THE SURVEY

The survey provides a comprehensive picture of the training of future scientists and engineers in the Nation's graduate schools. Data are used by Congress and the executive branch during budget preparation, and by State government agencies and other analysts to assess the future supply of science and engineering (S&E) personnel.

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information provided will be used for statistical purposes only. Response is entirely voluntary and failure to provide some or all of the information will in no way adversely affect your institution.

The average time required for questionnaire completion is 2 hours. Response burden comments should be directed to Herman Fleming of NSF at (703) 306-1243.

#### **Students Included in This Survey**

Count as graduate students persons enrolled **for credit** in any S&E master's or Ph.D. degree program in fall 1996. Report M.D., D.O., D.V.M., or D.D.S. candidates, interns, and residents in items 5 through 7 **only** if they are concurrently working for an S&E master's or Ph.D. degree or are enrolled in a joint medical/Ph.D. program. Individuals who already hold graduate or medical degrees and are working on another master's or Ph.D. degree are considered graduate students (items 5 through 7), not postdoctorates (item 8).

Include S&E students performing thesis or dissertation research away from the campus (for example, at Government-and contractor-owned facilities) in the United States as long as they are enrolled for credit in an advanced-degree program.

All data should be reported in terms of headcounts, not full-time equivalents (FTEs).

#### **Students Excluded From This Survey**

Exclude students enrolled in a foreign country (at a branch or extension center), and non-matriculated students.

#### **Students Enrolled in Multiple Departments/Institutions**

A student should be reported in only **one** department. Students enrolled in interdisciplinary/interinstitutional programs should be counted only once, by their "home" department and institution.

#### INCOMPLETE DATA

Please write "unavailable" or "unknown" in data cells as applicable. On this form, "N/A" means "not applicable." Data cells left blank are presumed to be zeroes.

#### ITEM 5: FULL-TIME STUDENTS

Report the total number of full-time degree-seeking students in line (6), column (L). Then, in lines (1) through (6), count each full-time student **only once** by **largest** source of support so that all columns and rows in item 5 sum to the full-time total in line (6), column (L). In item 5, count only graduate students pursuing an S&E degree according to a full-time schedule; this may include any combination of study, teaching, and research, depending on your institution's policy and definition of full-time status. For example, many institutions base full-time status on the number of credit hours taken; others calculate full-time according to the amount of fees paid by the student.

#### **Mechanisms of Support—Lines (1) Through (5)**

A **fellowship**, line (1), is any competitive award (often from a national competition) made to a student that requires no work of the recipient. A **traineeship**, line (2), is an educational award given to a student selected by the institution. An **assistantship** should be classified as **research**, line (3), or **teaching**, line (4), depending on assigned duties; e.g., a student devoting most of his or her time to teaching should be reported on line (4). All other full-time students, including members of the Armed Forces whose tuition is paid by the Department of Defense, and self-supported students, should be reported on line (5).

#### Federal Sources of Support—Columns (A) Through (G)

**Department of Defense (DoD)—Column (A):** Sources include the Departments of the Army, Navy, or Air Force, as well as programs within the Office of the Secretary of Defense. Students receiving their main support from the Veterans Administration under the G.I. Bill should be reported under column (F). "Other Federal sources."

**Department of Health and Human Services (HHS)**—**Columns (B) and (C):** Report students with support from the institutes or divisions of the National Institutes of Health (NIH) under column (B); report support from all other components of HHS in column (C). Refer to the organizational roster under "Definitions."

National Science Foundation (NSF)—Column (D): Report students receiving NSF graduate fellowships and minority fellowships, as well as those supported under NSF research grants.

U.S. Department of Agriculture (USDA)—Column (E): Include research assistants working on projects financed out

of Hatch, McIntyre-Stennis, or Smith-Lever formula funds, competitive research grants, and institution fellowship/training grants.

National Aeronautics and Space Administration (NASA)—Column (F): Report students with support from this agency.

Other Federal sources—Column (G): Report students receiving support from Federal agencies other than those listed in columns (A) through (F), such as the Fulbright program, the G.I. Bill, and Department of Education and Department of Energy programs. Students primarily supported by Federal loans should be reported in column (K), "Self-supported students."

## Non-Federal Sources of Support—Cols. (H) Through (J)

Institutional support—Column (H): Report students supported from YOUR institution, including those receiving tuition waivers. State and local government support should also be reported in this column. Students primarily supported with funds from the Federal Government, such as training grants, however, should be reported under the appropriate Federal agency.

**Foreign sources—Column (I):** Report students supported from any non-U.S. source, such as foreign governments, industrial firms, or specialized agencies of the United Nations.

Other U.S. sources—Column (J): Report students supported from nonprofit institutions, private industry, and all other non-Federal U.S. sources not included in columns (H) or (I).

Self-supported students—Column (K): Report both foreign and U.S. citizen students whose largest source of support comes from ANY loans (including Federal loans) or from personal or family financial contributions. These students must be included in the full-time total, line (6), column (L).

#### Women—Line (7)

Report all full-time female students by the source of their primary support. The total number of full-time women should be reported in line (7), column (L).

In each column, data on line (7) should not exceed the total on line (6).

#### First-Time Full-Time Students—Lines (8) and (9)

A first-time student has enrolled in the program in which he or she is pursuing a degree as of the beginning of the fall term in 1996. All other students should be considered to be beyond their first time of enrollment.

#### ITEM 6: PART-TIME STUDENTS

Report all part-time students in item 6, regardless of their source of support. Part-time students are pursuing an S&E graduate degree but NOT on a full-time schedule. Consider students part-time according to your own institution's definition of part-time status.

# ITEM 7: CITIZENSHIP AND RACIAL/ETHNIC BACKGROUND OF U.S. CITIZENS AND PERMANENT RESIDENTS

Report all U.S. citizens and permanent residents in columns (A) through (G), and count each student only once according to his or her racial/ethnic category as defined by the Bureau of the Census, listed under "Definitions."

Count foreign students, i.e., those holding temporary visas, only **once** in column (H), regardless of race/ethnicity. Native residents of a U.S. possession and applicants for U.S. citizenship holding green cards, however, should be reported as U.S. citizens.

Total full-time and part-time enrollments reported in item 7 should match those reported in items 5 and 6, respectively.

# ITEM 8: POSTDOCTORATES AND NONFACULTY RESEARCH STAFF WITH DOCTORATES

Postdoctorates—Columns (A) through (F): Include individuals with science and engineering Ph.D.'s, M.D.'s, D.D.S.'s, or D.V.M.'s (including foreign degrees equivalent to U.S. doctorates) who devote their **primary effort to their** own research training through research activities or study in the department under temporary appointments carrying no academic rank. These individuals may contribute to the academic program through seminars, lectures, or working with graduate students. Such postdoctorates may have different titles at different institutions, e.g., "Postdoctoral Scholar," "Research Associate," "Postdoctoral Fellow," or "Postgraduate Researcher." Exclude, however, clinical fellows and those with appointments in residency training programs in medical and health professions, unless research training under the supervision of a senior mentor is the primary purpose of the appointment.

Report postdoctorates by source of support in columns (A) through (D), with the total number of postdoctorates reported in column (E). Of this total, report the number who are foreign in column (F).

Other non-faculty research staff with doctorates—Column (G): Include all doctoral scientists and engineers who are involved principally in research activities but are not considered either postdoctoral appointees or members of the

regular faculty.

On line (2), report the number of women in each category. On line (3), report those postdoctorates and nonfaculty research staff who hold first professional medical degrees (M.D., D.O., D.D.S., D.V.M.). Please note that in each column, data on lines (2) and (3) should not exceed the total on line (1).

#### **DEFINITIONS**

# (1) NATIONAL INSTITUTES OF HEALTH ORGANIZATIONAL ROSTER—Item 5. column (B)

Fogarty International Center

National Cancer Institute

National Center for Human Genome Research

National Center for Nursing Research

National Center for Research Resources

National Eye Institute

National Heart, Lung, and Blood Institute

National Institute of Arthritis and Musculoskeletal and

Skin Diseases

National Institute of Child Health and Human Development

National Institute of Dental Research

National Institute of Diabetes and Digestive and Kidney Diseases

National Institute of Environmental Health Sciences

National Institute of General Medical Sciences

National Institute of Mental Health

National Institute of Neurological Disorders and Stroke

National Institute on Aging

### National Institute on Alcohol Abuse and Alcoholism National Institute of Allergy and Infectious Diseases National Institute on Deafness and Other Communication Disorders National Institute on Drug Abuse National Library of Medicine

#### (2) OTHER HHS ADMINISTRATIVE UNITS

—Item 5, column (C)

Substance Abuse and Mental Health Services Administration (Please note that the former Alcohol, Drug Abuse and Mental Health Administration institutes are now part of the National Institutes of Health.)

Centers for Disease Control

National Institute for Occupational Safety and Health Food and Drug Administration Health Resources and Services Administration

(3) RACIAL/ETHNIC CATEGORIES FOR U.S. CITIZENS AND PERMANENT RESIDENTS DEFINED BY THE BUREAU OF THE CENSUS

—Item 7

**Black, non-Hispanic:** Persons having origins in any of the black racial groups (except those of Hispanic origin).

**American Indian or Alaskan native:** Persons having origins in any of the original peoples of North America.

**Asian or Pacific Islander:** Persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. These areas include China, Japan, Korea, the Philippine Islands, and Samoa.

**Hispanic:** Persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

White, non-Hispanic: Persons having origins in any of the original peoples of Europe, North Africa, or the Middle East, except those of Hispanic origin.

#### FOR FURTHER INFORMATION . . .

If you have any questions about this survey, please contact Ms. Karen Gliwa or Ms. Veerle Van Meel of Quantum Research Corporation by telephone at (301) 657-3070, or by e-mail at qss@grc.com.

UPON COMPLETING THIS FORM, PLEASE RETURN IT TO YOUR SURVEY COORDINATOR FOR TRANSMITTAL BY JANUARY 31, 1997.